



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

REGION I
2100 RENAISSANCE BLVD., SUITE 100
KING OF PRUSSIA, PA 19406-2713

January 20, 2015

Mr. Thomas P. Joyce
President and Chief Nuclear Officer
PSEG Nuclear LLC – N09
P. O. Box 236
Hancocks Bridge, NJ 08038

SUBJECT: SALEM NUCLEAR GENERATING STATION, UNITS 1 AND 2 - NRC INITIAL
OPERATOR LICENSING EXAMINATION REPORT 05000272/2014301;
05000311/2014301

Dear Mr. Joyce:

On December 19, 2014, the U.S. Nuclear Regulatory Commission (NRC) completed an examination at Salem Nuclear Generating Station Units 1 and 2. The enclosed examination report documents the examination results, which were discussed on January 15, 2015, with Messrs. J Carney, and other members of your staff.

The examination included the evaluation of four applicants for reactor operator licenses and eight applicants for instant senior reactor operator licenses. The written and operating examinations were developed using NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Revision 9, Supplement 1. The license examiners determined that all of the 12 applicants satisfied the requirements of 10 CFR Part 55, and the appropriate licenses were issued on January 15, 2015.

No findings were identified during this examination.

In accordance with Title 10 of "*Code of Federal Regulation (CFR)*," 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's Agencywide Documents Access Management System (ADAMS). ADAMS is accessible from the NRC Web site <http://www.nrc.gov/reading-rm/adams.html#web-based-adams> (the Public Electronic Reading Room).

Sincerely,

/RA/

Donald E. Jackson, Chief
Operations Branch
Division of Reactor Safety

Docket Nos.: 50-272; 50-311
License Nos.: DPR-70; DPR-75

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Distribution: See Next Page

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DATE	1/20/15	1/20/15			

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T. Joyce

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Enclosure:

Examination Report 05000272&311/2014301
w/Attachment: Supplementary Information

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EXAMINATION REPORT

**U.S. NUCLEAR REGULATORY COMMISSION
REGION I**

Dockets: 50-272, 50-311

Licenses: DPR-70, DPR-75

Report: 05000272/2014301; 05000311/2014301

Licensee: PSEG Nuclear LLC (PSEG)

Facility: Salem Nuclear Generating Station Units 1 and 2

Location: P.O. Box 236
Hancocks Bridge, NJ 08038

Dates: 12/8-15/2014 (Operating Test Administration)
12/17/2014 (Written Examination Administration)
12/24/2014 (Licensee Submitted Post Exam Package)
1/12/2015 (NRC Examination Grading)
1/15/2015 (Licenses Issued)

Examiners: D. Silk, Chief Examiner, Operations Branch
P. Presby, Senior Operations Engineer
B. Fuller, Senior Operations Engineer
T. Hedigan, Operations Engineer
N. Graneto, Operations Engineer (Observer)

Approved By: Donald E. Jackson, Chief
Operations Branch
Division of Reactor Safety

SUMMARY

ER 05000272/2014301; 05000311/2014301; 12/08/2014 – 12/19/2014; Salem Nuclear Generating Station Units 1 and 2; Initial Operator Licensing Examination Report.

Four NRC examiners evaluated the competency of four applicants for reactor operator licenses and eight applicants for instant senior reactor operator licenses at Salem Nuclear Generating Station Units 1 and 2. The facility licensee developed the examinations using NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Revision 9, Supplement 1. The written examination was administered by the facility on December 19, 2014. NRC examiners administered the operating tests on December 8-15, 2014. The NRC examiners determined that all of the 12 applicants satisfied the requirements of 10 CFR Part 55, and the appropriate licenses have been issued.

No findings were identified.

REPORT DETAILS

4. OTHER ACTIVITIES (OA)

4OA5 Other Activities (Initial Operator License Examination)

.1 License Applications

a. Scope

The examiners reviewed all 12 license applications, and additional information, submitted by the licensee to ensure the applications reflected that each applicant satisfied relevant license eligibility requirements. This review focused on the applicant's experience and on-the-job training, including control manipulations that provided significant reactivity changes. The applications were submitted on NRC Form 398, "Personal Qualification Statement," and NRC Form 396, "Certification of Medical Examination by Facility Licensee."

b. Findings

No findings were identified.

.2 Operator Knowledge and Performance

a. Examination Scope

On December 19, 2014, the licensee proctored the administration of the written examinations to all 12 applicants. The licensee staff graded the written examinations, analyzed the results, and presented their analysis to the NRC on December 24, 2014.

The NRC examination team administered the various portions of the operating examination to all 12 applicants on December 8-15, 2014. The four applicants for reactor operator licenses participated in three dynamic simulator scenarios, in a control room and facilities walkthrough test consisting of 11 system tasks, and an administrative test consisting of four administrative tasks. The eight applicants seeking an instant senior reactor operator license participated in three dynamic simulator scenarios, a control room and facilities walkthrough test consisting of 10 system tasks, and an administrative test consisting of five administrative tasks.

b. Findings

All 12 of the applicants passed all parts of the operating test and the written examination. For the written examinations, the reactor operator applicants' average score was 93.24 percent and ranged from 89.19 to 95.94 percent, the senior operator applicants' average score was 88.00 percent and ranged from 80.61 to 96.93 percent. The overall written examination average was 89.75 percent. The NRC examiners

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completed the final grading of the written examination on January 12, 2015, and conducted a review of each missed question to determine the accuracy and validity of the examination questions. The text of the examination questions, the licensee's examination analysis, and the licensee's post-examination comments may be accessed in the Agencywide Documents Access System (ADAMS) system under the accession numbers noted in the attachment. In accordance with current NRC policy, the release of this written examination in ADAMS to the public will be delayed for 2 years.

Chapter ES-403 and Form ES-403-1 of NUREG 1021 require the licensee to analyze the validity of any written examination questions that were missed by half or more of the applicants. The licensee conducted this performance analysis for questions that were missed by 30 percent or more of the applicants. Eighteen questions met these criteria and the licensee submitted the analysis to the chief examiner. This analysis concluded that one of the questions (RO#61) indicated that a clarifying note should be added to the applicable lesson plan.

The licensee submitted three post-examination question comments, and the associated technical references, on December 24, 2014, and can be found in ADAMS under ML15009A252. The NRC reviewed the facility's post-exam comment submittal package and accepted the facility recommendations based upon the technical merits of the comments. Details regarding the NRC's resolution of the facility recommendations are contained in ADAMS under ML15020A701. The NRC concluded that RO #61 and SRO #8 will be deleted from the examination and SRO#6 will accept Choices c. and d. as correct responses.

.3 Initial Licensing Examination Development

a. Examination Scope

The facility licensee developed the examinations in accordance with NUREG-1021, Revision 9, Supplement 1. All licensee facility training and operations staff involved in examination preparation and validation were listed on a security agreement. The facility licensee submitted both the written and operating examination outlines on September 19, 2014. The chief examiner reviewed the outlines against the requirements of NUREG-1021, and provided comments to the licensee. The facility licensee submitted the draft examination package on October 22, 2014. The chief examiner reviewed the draft examination package against the requirements of NUREG-1021, and provided comments to the licensee on the examination during the week of November 3, 2014. The NRC conducted an onsite validation of the operating examinations and provided further comments during the week of November 10, 2014. The licensee satisfactorily completed comment resolution on November 24, 2014.

b. Findings

The NRC approved the initial examination outline and advised the licensee to proceed with the operating examination development.

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The examiners determined that the written and operating examinations initially submitted by the licensee were within the range of acceptability expected for a proposed examination.

No findings were identified.

.4 Simulation Facility Performance

a. Examination Scope

The examiners observed simulator performance with regard to plant fidelity during the examination validation and administration.

b. Findings

No findings were identified.

.5 Examination Security

a. Examination Scope

The examiners reviewed examination security for examination development and during both the onsite preparation week and examination administration week for compliance with NUREG-1021 requirements. Plans for simulator security and applicant control were reviewed and discussed with licensee personnel.

b. Findings

No findings were identified.

4OA6 Meetings, Including Exit

The chief examiner presented the examination results to Mr. J. Carney, Training Manager, and other members of the licensee's management staff on January 15, 2015. The licensee acknowledged the findings presented.

The licensee did not identify any information or materials used during the examination as proprietary.

Attachments:

1. Supplementary Information

Enclosure

SUPPLEMENTARY INFORMATION

KEY POINTS OF CONTACT

Licensee Personnel

J. Carney, Operations Training Manager

G. Gauding, Simulator Support-Section Leader

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

NONE

Opened and Closed

NONE

Closed

NONE

Discussed

NONE

ADAMS DOCUMENTS REFERENCED

Accession No. ML15009A286 – FINAL-Written Exam (Note: In accordance with current NRC policy, the release of this written examination in ADAMS to the public will be delayed for 2 years.)

Accession No. ML15009A340 – FINAL-Operating Exam

Accession No. ML15009A252 – FINAL-Post Exam Comments and Technical References

Accession No. ML15020A701– FINAL-Post Exam Comment Resolutions